

U.S. Pat. Appln. No.: 10/062,257

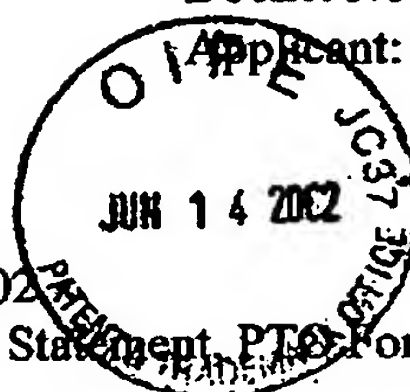
Filed: February 1, 2002

Docket No. 3190-014

Applicant: Kyogo ITOH

Entitled: TUMOR ANTIGEN

Papers filed herewith on: June 10, 2002
Supplemental Information Disclosure Statement, PTO Form 1449, and 1 document.



COMMISSIONER OF PATENTS

Receipt is hereby acknowledged of the papers filed as indicated in connection with the above-identified case

LAK/ajs

✓

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 72.2)

From the INTERNATIONAL BUREAU

To:

SHOJI, Takashi
SN Iwamotocho Building
6th Floor
2-10, Iwamotocho 3-chome
Chiyoda-ku
Tokyo 101-0032
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| | |
|--|---|
| Date of mailing (day/month/year) 10 May 2002 (10.05.02) | IMPORTANT NOTIFICATION |
| Applicant's or agent's file reference GP00-1017 | |
| International application No. PCT/JP00/05220 | International filing date (day/month/year) 03 August 2000 (03.08.00) |
| Applicant ITOH, Kyogo | |

1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

2. Transmittal of the copy of the translation to the elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

EP,CA,CN,KP,RO,US

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AP,EA,AE,AG,AL,AM,AT,AU,AZ,BA,BB,BG,BR,BY,BZ,CH,CR,CU,CZ,DE,DK,DM,DZ,EE,ES,FI,GB,
GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KR,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,
MW,MX,MZ,NO,NZ,PL,PT,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW,OA

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the International application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

| | |
|--|---|
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35 | Authorized officer Eliott PERETTI Telephone No. (41-22) 338.83.38 |
|--|---|

Form PCT/IB/338 (July 1996)

4847268

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| | | |
|---|--|---|
| Applicant's or agent's file reference GP00-1017 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/JP00/05220 | International filing date (day/month/year) 03 August 2000 (03.08.00) | Priority date (day/month/year) 05 August 1999 (05.08.99) |
| International Patent Classification (IPC) or national classification and IPC C12N 15/12, C07K 14/82, 7/00, A61K 39/00, 39/395, 48/00, 45/00, A61P 35/00, A61K 38/10, G01N 33/50, 33/15 | | |
| Applicant ITOHI, Kyogo | | |

| | |
|---|---|
| 1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. | |
| 2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet. | |
| <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). | |
| These annexes consist of a total of <u>1</u> sheets. | |
| 3. This report contains indications relating to the following items: | |
| I | <input checked="" type="checkbox"/> Basis of the report |
| II | <input type="checkbox"/> Priority |
| III | <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| IV | <input type="checkbox"/> Lack of unity of invention |
| V | <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI | <input type="checkbox"/> Certain documents cited |
| VII | <input type="checkbox"/> Certain defects in the international application |
| VIII | <input type="checkbox"/> Certain observations on the international application |

| | |
|--|---|
| Date of submission of the demand 02 March 2001 (02.03.01) | Date of completion of this report 29 October 2001 (29.10.2001) |
| Name and mailing address of the IPEA/JP | Authorized officer |
| Facsimile No. | Telephone No. |

Form PCT/IPEA/409 (cover sheet) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP00/05220

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-45, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 1-15, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages 18-20, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages 1-15, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the sequence listing part of the description:
 pages 1-5, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

- These elements were available or furnished to this Authority in the following language _____ which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. 16,17
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP00/05220

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 13,14,15

because:

☒ the said international application, or the said claims Nos. 15
relate to the following subject matter which does not require an international preliminary examination (*specify*):

See supplemental sheet for continuation of Box III. 1.

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 13,14
are so unclear that no meaningful opinion could be formed (*specify*):

See supplemental sheet for continuation of Box III. 1.

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 15

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

Form PCT/IPEA/409 (Box III) (July 1998)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP 00/05220

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III. 1

Claim 15 pertains to methods for treatment of the human body by therapy and to diagnostic methods applied to the human body, and thus relates to subject matter which does not require international preliminary examination by this International Preliminary Examining Authority.

The statements "compounds obtained by the screening method" in Claim 13 and the "pharmaceutical compositions ... containing a compound obtained by screening" in Claim 14 are very unclear, since the nature of the specific compounds included among and not included among the compounds in these claims is completely unclear.

Therefore, it is impossible to express an opinion as to the novelty, inventive step or industrial applicability of the inventions set forth in the aforementioned claims.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 00/05220

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

I. Statement

| | | | |
|-------------------------------|--------|-------------|-----|
| Novelty (N) | Claims | 1-12, 18-20 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 1-12, 18-20 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-12, 18-20 | YES |
| | Claims | | NO |

Document 1: M. Kikuchi et al., "Identification of a SART-1-derived peptide capable of inducing HLA-A-A24-restricted and tumor-specific cytotoxic T lymphocytes", Int. J. Cancer (May 1999), Vol. 81, No.3, pp. 459-466

Document 2: Y. Koga et al., "A human T cell-specific cDNA clone (YT16) encodes a protein with extensive homology to a family of protein-tyrosine kinases", Eur. J. Immunol. (1986), Vol. 16, No. 12, pp. 1643-1646

Document 3: A. Tanaka et al., "DNA sequence encoding the amino acid terminal region of the human c-src protein: implications of sequence divergence among src-type kinase oncogenes", Mol. Cell Biol. (1987), Vol. 7, No. 5, pp. 1978-1983

The inventions disclosed in Documents 1-12 and 18-20 involve an inventive step relative to Documents 1 to 3 cited in the international search report. None of Documents 1 to 3 discloses "a peptide recognized by tumor-specific cytotoxic T cells", and such a peptide could not be deduced easily by a person skilled in the art from Documents 1 to 3.

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